

(MCLB) is calculated for behavioral response. It measures the useful information about low-frequency hearing, it provides more information about the hearing of neurologically immature babies, it demonstrates the benefit of hearing aids, and give indication of uncomfortable loudness levels. The NRT/ART and MCLB were calculated for second, sixth, and eleventh electrode for different patients in our study.

**Result** Neural response threshold is better for rehabilitations then behavioral observation audiometry for CI patients. Mean value and standard deviation of auditory/neural response threshold were 10.23, 3.67; 11.27, 4.39; and 10.71, 3.88 at second, sixth, and eleventh electrodes, respectively. Mean value and standard deviation of most comfortable level for behavioral response were 20.49, 7.08; 21.26, 7.31; and 21.01, 6.03 at second, sixth, and eleventh electrodes, respectively.

**Conclusion** Neural response threshold is better for postoperative rehabilitations and MCL and THR vary with different electrodes and in different patients.

**Clinical Significance** Neural/auditory response threshold (NRT/ART) is much more significant and better for rehabilitations for cochlear implant recipient than most comfortable level for behavioral (MCLB).

#### **A0031: Anatomy of Mesotympanum: Human Temporal Bone Study**

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**Introduction** The medial wall of the middle ear has two windows, the oval window and round window. The oval window accommodates the foot plate of stapes, while the round window is covered by the round window membrane (RWM). There are no published studies to measure area of round window membrane. The purpose of this study is to know the variations in anatomy of mesotympanum, to know accessibility of round window membrane for cochlear implantation.

**Aims** (1) To study anatomy of posterior mesotympanum, inferior wall of round window (fustis), subiculum, operculum of round window.

- (2) To measure the area of round window membrane.
- (3) To measure angle of insertion of electrode.

**Methods** Formalin preserved human temporal bone were used. Through transmastoid facial recess approach, endoscope and microscope were used to identify structures in mesotympanum point where perpendicular drawn from superior most part of round window to vertical segment of facial nerve and tangent drawn from osseous spiral lamina to superior part of round window meet are used as a reference point. Molding material (Aquasil Soft Putty) used to procure three-dimension mold of round window membrane. Using caliper, measurements were performed and mean measurement was calculated. Under direct visualization, dummy electrode was inserted in anterior vector from reference point through facial recess.

**Results and Conclusions** More obtuse the angle of insertion, cochleostomy for electrode insertion. The area of round window was measured and tabulated.

#### **A0032: Evaluation of Temporal Bone Cholesteatoma and the Correlation between High-Resolution Computed Tomography and Surgical Findings**

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**Aims and Objectives** To study the role of HRCT in the preoperative evaluation of patients with cholesteatoma

**Materials and Methods** For the purpose of this study, a total of 60 patients attending outpatient department (OPD) and clinically diagnosed as squamosal type of chronic otitis media were included in the study. All the patients underwent a detailed history taking and clinical ENT examination. All otoscopic findings were confirmed by otomicroscopy. A preoperative HRCT of the temporal bone was done, using 128 slice GE CT scanner (VCT GE) in all the 60 patients. The selected patients then underwent tympanomastoidectomy via post aural route both under local and general anesthesia. Intraoperative findings were noted and preoperative HRCT findings were confirmed and compared with the intraoperative surgical findings.

**Result** Based on the findings, the present study concludes that preoperative HRCT has an excellent correlation with the intraoperative findings in detecting the location and extension of soft tissue and bony erosions for most of the structure except facial canal erosion and stapes where sensitivity was found to be low. Also, in this study, HRCT could not differentiate cholesteatoma from other pathology.

**Conclusion** The early identification of soft tissue and subtle bony erosions on HRCT helps the surgeon in planning the appropriate management and preventing impending complications.

**Clinical Significance** HRCT also serves as a tool in guiding the surgeon during surgery by giving prior information about the extent of the disease and associated bony erosions. Thus, HRCT of the temporal bone, as a preoperative investigation modality, is invaluable in the diagnosis and management of cholesteatoma.

#### **A0033: Case Series of Veria Technique Cochlear Implant Done at Our Centre (VIMS and RC)**

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**Introduction** Veria technique used for cochlear implantation is a technique involving endaural route for the cochleostomy with a transcanal tunnel drilled in posterior canal wall, it is a nonmastoidectomy technique which provides a wide visible area for performing the electrode insertion into cochlea.

**Case Presentation** Six prelingual deaf and mute children coming to our outpatient department within the age group of 2 to 5 years during 2011 to 2017 with preoperative assessment, which included detailed antenatal, intranatal, postnatal, and developmental history and speech assessment